



Public Health Initiatives

Using Information Technology to Improve retention in Care: The K4Action app

Sustained, regular HIV care, including initiating and maintaining antiretroviral therapy (ART), is vital to the overall health of HIV-infected patients and for the prevention of HIV transmission. On the APIN iCARES project, Benue State accounts for about 60% of the total number of people living with HIV (PLHIV) enrolled in care (TX_CURR) across various health facilities and as part of its effort to ensure improved quality of care for patients, APIN conducted a Patient Satisfaction.

Survey (PSS) to understand the factors associated with poor retention in care among PLHIV. Findings from the survey showed that the major reason for poor retention in care was non-compliance with clinical appointments resulting from patients forgetting their next appointment dates for ARV refill. To address this challenge of non-compliance, the APIN Strategic Information (SI) team developed an innovative application called K4Action.

“With this application, we are able to send SMS reminders to our clients in Benue. This has improved our patient management with regards to appointment schedules and it has improved retention. If this is deployed to other APIN states it would put APIN at the top for patient retention.”

- Mr. Oluseun Olaifa
Technical Advisor-Health Informatics

K4Action (Knowledge for Action) is a web-based application developed by APIN to serve as a platform for data-based patient management and patient retention through appointment reminders.

The K4Action app is a central repository that houses and displays summaries of treatment performance, viral load (VL) cascade, retention, retrospective and prospective appointment schedules, and missed appointment reports on a dashboard with a capability to download line lists of patients for active program decisions and action.



An interesting feature of the app is the SMS reminder feature, which allows the application to send SMS reminders to patients scheduled for appointments a week prior and on the day of their appointments.

It also has the ability to generate automated routine weekly and monthly reports from the

Health Informatics unit, to aid the delivery of prompt interventions to patients.

Another exciting feature of the K4Action app is that it can be easily upgraded to suit program needs.

The app was modified over time to incorporate the change of days before a patient becomes classified as interruption in treatment (IIT) from 90 days to 28 days, low-level viremia (LLV), patients returned to treatment (TX_RTT) and treatment mortality and lost to follow up (TX_ML), upgraded to generate reports daily.

The SMS automation of the K4Action application has greatly improved appointment compliance in Benue State and this, in turn, has improved retention, with reporting fully automated to enhance patient quality care through data.

“This is a top tier, cutting edge, innovative approach to patient retention and management.”

- Dr Mikhail Obaje
Senior Technical Advisor –
Strategic Information)

